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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,123	11/25/2003	Hoi-Jin Lee	2557-000191/US	4385
30593	7590	07/28/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			TRIMMINGS, JOHN P	
			ART UNIT	PAPER NUMBER
			2138	

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/720,123

Applicant(s)

LEE, HOI-JIN

Examiner

John P. Trimmings

Art Unit

2138

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This office action is in response to the applicant's amendment dated 7/3/2006.

The applicant has amended claims 15, 16 and 19.

The applicant has cancelled claims 17, 24 and 25.

Claims 1-17 and 19-23 are pending.

### *Response to Amendment*

1. As per the Drawings:

The examiner maintains the objection to the drawings as outlined in the previous office action in view of the applicant's changes to FIG. 1, and further objects to the applicant's revised FIG. 1 as not depicting the limitations of claim 16, and therefore does not approve of FIG. 1 being entered into the record. The reason that the drawings and claim 16 are at odds is because the subject matter of claim 16 is the "test signal(s)" of claim 15. The test signal of claim 15 is the waveform of FIG. 3, and is not an I/O pad signal as was introduced in the amended drawing by the applicant.

It is the examiner's view that FIG. 1 *in its original form is acceptable*, and that the applicant's attempt to change the wiring in FIG. 1 does not meet with the words of the limitations in claim 16, and so the examiner maintains the objection, and sees no possible change to FIG. 1 which would cause withdrawal of said objection made in the previous office action. Instead, it is the examiner's opinion, based on the above, that the claim should be cancelled.

2. As per the Specification:

The changes to paragraph [0014] are not approved for entry because the paragraph as amended refers to I/O pins 101-108 in the drawing of FIG. 1 that connect to the speed correlation circuits, instead of being connected to the core circuit. The examiner does not see any reason to change this paragraph, and did not object to said paragraph in the previous office action. The examiner as well does not see a reason to change FIG. 1 (see above).

The examiner, on page 3 and 4 of the previous office action, objected to page 6 lines 1 and 3, but the applicant did not agree and so did not change paragraph [0019]. The examiner explains as follows: The discussion of the unit delay circuits refers to from 1 to n unit delay circuits. If none, or an even number of inverter circuits are present, then the circuit will not oscillate. Therefore, it is necessary to have at least one, **but in any case**, an odd number of inverters *in order to oscillate*, therefore the examiner maintains to objection to the lines 1 and 3 of page 6 (paragraph [0019]).

The examiner objects to the changes submitted for paragraph [0018] because the 1<sup>st</sup> and 2<sup>nd</sup> lines recites, "circuits 170 through 150", which is not correct. Therefore the examiner does not approve entry of the paragraph.

In view of the changes to paragraph [0020], the examiner withdraws the objection to said paragraph and approves entry.

3. As per the Objections to the claims:

In view of the changes to the claims, the examiner withdraws all objections to the claims.

4. As per Rejections under 35 USC 112:

In view of the amendment to claim 16, the examiner withdraws the rejection. However, as the meaning has been cleared up, the examiner now rejects the claim as outlined below.

In view of the amendment to claim 19, the examiner withdraws the rejection of said claim.

5. As per Rejections under 35 USC 102 and 103:

In view of the cancelled claims 17, 24 and 25, the examiner withdraws the rejections of said claims.

Applicant's arguments filed 7/3/2006 in regard to claims 1-16 and 18-23 have been fully considered but they are not persuasive. The applicant has applied the same argument to all claim rejections based on the following:

- a. The applicant states on page 11 that TAP1 is not a pad. Instead, the applicant contends that the reference signal TAP1 is an intermediate data signal,

but does not further explain the signal, but the examiner disagrees. The examiner has shown that the TAP1 signal is a test signal 32a taken from the terminals TAP1 – TAP3 of FIG. 14. The “terminals” are “pads” (refer to column 12 lines 4-7 of Inoshita) where the signals “are output to the outside from test terminals TAP1 – TAP3”. Therefore the examiner rejects the applicant’s argument.

b. The applicant states on page 12 that Inoshita does not teach a different number of delay circuits, but the examiner disagrees. The examiner refers the applicant to column 12 lines 66-67 and column 13 lines 1-10, where, “there are no particular restrictions on the number of delay circuits provided to the delay monitor circuit 2g ...”. This paragraph teaches that the FIG. 16 delay monitor circuit 2g may contain any number of delay circuits 9, therefore the argument is rejected.

In view of the above, the examiner maintains the rejections of claims 1-16 and 18-23.

***Claim Rejections - 35 USC § 112 (New)***

6. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim states that the test method comprises “receiving the test signals from a core circuit”, but the examiner is unsure of how the core circuit is generating test signals because test signals are generated by the connected circuit groups of claim 15, therefore the claim is indefinite.

***Conclusion***

Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Trimmings whose telephone number is (571) 272-3830. The examiner can normally be reached on Monday through Thursday, 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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